

# Notice of Allowability

Application No.

10/801,410

Examiner

David M. Brunsman

Applicant(s)

POLSTON, DAVID L.

Art Unit

1755

## -- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to the amendment filed 09 March 2006.
2. ☒ The allowed claim(s) is/are 3-12.
3. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
  - a) ☐ All b) ☐ Some\* c) ☐ None of the:
    1. ☐ Certified copies of the priority documents have been received.
    2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
    3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

\* Certified copies not received: \_\_\_\_\_.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.  
**THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.**

4. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
5. ☐ CORRECTED DRAWINGS ( as "replacement sheets") must be submitted.
  - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review ( PTO-948) attached
    - 1) ☐ hereto or 2) ☐ to Paper No./Mail Date \_\_\_\_\_.
  - (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date \_\_\_\_\_.

Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

### Attachment(s)

1. ☒ Notice of References Cited (PTO-892)
2. ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3. ☐ Information Disclosure Statements (PTO-1449 or PTO/SB/08), Paper No./Mail Date \_\_\_\_\_
4. ☐ Examiner's Comment Regarding Requirement for Deposit of Biological Material
5. ☐ Notice of Informal Patent Application (PTO-152)
6. ☐ Interview Summary (PTO-413), Paper No./Mail Date \_\_\_\_\_
7. ☒ Examiner's Amendment/Comment
8. ☒ Examiner's Statement of Reasons for Allowance
9. ☐ Other \_\_\_\_\_

Art Unit: 1755

An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.

The application has been amended as follows:

In claim 3, line 8, replace "cement of fly ash" with:--cement or fly ash--.

In claim 8, line 8, replace "cement of fly ash" with:--cement or fly ash--.

This examiner amendment merely corrects an obvious typographical error and does not materially affect the scope of meaning of the claims.

The following is an examiner's statement of reasons for allowance: The difference between the prior art of record and the instant claims is "...passing the drilling waste and aggregate through a screen...". The level of *ordinary* skill in this art and the predictability of this art are limited. Consideration of the prior art documents generally shows a limited knowledge of which chemical reactions are critical to the stabilization processes, simple trial and error experimentation and limited characterization of the chemical composition of the wastes to be treated. It appears most testing and experimentation is done under the practical supervision in the field operators without advanced training in chemistry as compared to the complex and exacting disclosure of the chemistry necessary for virgin drilling fluids to meet well defined performance requirements upon use downhole.

The teaching of the prior art that would support a finding of obviousness include the general awareness that screening is done in various fields to remove oversize materials and documents such as US 4942929 that discloses screens used with drilling fluids to screen out "gravel" (cuttings) from the fluid which gravel then may be used as a construction material.

Art Unit: 1755

I.e. the use of screening *per se* is known to one of ordinary skill in the art. Evidence of record supports a finding of non-obviousness. Improper hindsight would be required to add a screening step to the relevant prior art as there is no evidence of record that "oversize" material is present or a concern.

US 4942929 teaches that the material to be later used as a construction material it that which **does not** pass the screen, as opposed to the instant case.

US 4942949 Discloses disposal of material passing screen limited to downhole injection.

The Fact Sheet – Beneficial Reuse of Drilling Wastes reference teaches reuse of material retaining on site on the shale shakers (similar to 4942949). It also teaches that the remaining coating on the cuttings may need to be removed as detrimental to reuse as construction material. It teaches away from Reuse as Construction material for drilling wastes in general ("relatively hard to reuse for construction purposes", "legal liabilities always stay with the company who produced the waste initially")

US 5277519 (column 1/23-29) teaches away from separating the components of drilling waste as it just creates another waste stream.

US 2003/127903 is representative of a large body of art showing use of the retentate from the shale shakers for reuse as construction material that, despite ample opportunity, fails to suggest using waste passing a screen.

US 6695077 teaches agglomeration of drilling waste to allow handling thereof for reuse, teaching the desirability increasing the size of the solids present in contrast to the opposite effect of screening.

There is no reason to screen drilling wastes to remove oversize materials, as the average particle size therein is about 200 microns (large pieces are not entrained in the drilling fluid to return to the surface). Nor, would it make sense to screen out larger rock cuttings and then add back in aggregate in the form of larger rock pieces.

The specification teaches (see paragraph 58) "In this manner [the claimed method] drilling waste may be effectively combined with an aggregate to form an environmentally safe road base

Art Unit: 1755

capable of passing most government agency standards and engineered to pass tests to determine its structural characteristics," such that the limitation is critically to the invention.

In conclusion, the preponderance of the evidence of record supports the finding of non-obviousness for the instant claims as amended.

The patentability of the claims wherein the separator is placed above the batch mixer is addressed in previous office actions.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Any inquiry concerning this communication or earlier communications from the examiner should be directed to David M. Brunsman whose telephone number is 571-272-1365. The examiner can normally be reached on M, W, F, Sa; 6:00-4:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jerry Lorengo can be reached on 571-272-1362. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

David M Brunsman  
Primary Examiner  
Art Unit 1755

